AMENDMENTS TO THE CLAIMS

Please amend claims 5, 8-9, 12, and 19 as shown in the PENDING CLAIMS section bellow. Claims 1-4, 6-7, 10-11, 13-18, and 20-30 remain unchanged. Please add new claims 31-44 as shown in the PENDING CLAIMS section. The PENDING CLAIMS section presents a detailed listing of all claims that are, or were, in the application, using status identifiers.

PENDING CLAIMS

1. (Currently Amended) A method for ~~of~~ setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:

obtaining a user service profile configured with a QoS level for the user in response to a user log-in attempt to a service selection gateway (SSG);

routing all packets originated by the user through the SSG during a session;

setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user; and

passing, after said QoS bits have been set, said packets on to the data communications network.

2. (Original) A method in accordance with claim 1 wherein all packets transmitted by the user have QoS bits set in accordance with QoS level for the user.

3. (Currently Amended) A method for ~~of~~ setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:

initiating a request to an authentication, authorization and accounting (AAA) server in response to the user's attempt to log-in;

receiving, in response to said request, a user service profile corresponding to the user, said user service profile including a Quality of Service field; and

using said Quality of Service field to set the QoS bits within said packets transmitted by the user.

4. (Original) A method in accordance with claim 3 wherein all packets transmitted by the user have QoS bits set in accordance with said Quality of Service field of said user.

5. (Currently Amended) A method for ~~of~~ setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:

receiving, at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user;

assigning, in response to said request, a Quality of Service level to said at least one packet flow;

setting said QoS bits within said packets belonging to said at least one packet flow received at the service selection gateway in accordance with said Quality of Service level; and

transmitting said packets belonging to said at least one packet flow to the data communications network.

6. (Previously Amended) A method in accordance with claim 5 wherein all of said packets of said at least one packet flow are IP packets.

7. (Original) A method in accordance with claim 6 wherein said QoS bits are the precedence bits within the ToS/Differentiated Services field of said IP packets.

8. (Currently Amended) A method in accordance with claim 5, further comprising:

communicating between the service selection gateway and an AAA server request.

9. (Currently Amended) A method in accordance with claim 8, further comprising:

communicating between the service selection gateway and the AAA server information related to the quantity of packets transmitted by the user and modified by the service selection gateway with respect to the QoS bits.

10. (Original) A method in accordance with claim 8, further comprising:

communication between the service selection gateway and the AAA server information related to the duration of time that packets transmitted by the user are modified by the service selection gateway with respect to the QoS bits.

11. (Original) A method in accordance with claim 10, further comprising:

communicating between the service selection gateway and the AAA server information related to the quantity of packets transmitted by the user and modified by the service selection gateway with respect to the QoS bits.

12. (Currently Amended) An apparatus for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network ~~system~~, said apparatus comprising:

a service selection gateway (SSG) in communication with the user, said SSG also in communication with an authentication, authorization and accounting (AAA) server, said SSG receiving a user service profile including a QoS level from the AAA server in response to an attempt to log-in by the user; and

a packet modifier associated with said SSG, said packet modifier modifying the QoS bits of packets sent by the user to reflect the QoS level received for the user from the AAA server.

13. (Original) An apparatus according to claim 12 wherein all packets transmitted by the user to the data communications network via the SSG are modified.

14. (Original) An apparatus according to claim 12 wherein packets belonging to at least one flow of packets transmitted by the user to the data communications network via the SSG are modified.

15. (Original) An apparatus according to claim 13 wherein all modified packets are IP packets.

16. (Original) An apparatus according to claim 14 wherein all modified packets are IP packets.

17. (Original) An apparatus according to claim 15 wherein the QoS bits are the precedence bits in the ToS/Differentiated Services field of the IP packets.

18. (Original) An apparatus according to claim 16 wherein the QoS bits are the precedence bits in the ToS/Differential Service field of the IP packet.

19. (Currently Amended) An apparatus for setting Quality of Service (QoS) indicator bits of packets sent by a user of a data communications network ~~system~~, said apparatus comprising:

a service selection gateway (SSG) in communication with the user and the data communications network;

a packet modifier associated with said SSG, responsive to a QoS request by the user, setting a QoS bit field of packets sent by the user to the data communications network via the SSG.

20. (Original) An apparatus according to claim 19 wherein said QoS bit field is set to a value specified in said QoS request.

21. (Original) An apparatus according to claim 20 wherein said QoS bit field is set for all packets sent by the user to the data communications network via the SSG.

22. (Original) An apparatus according to claim 20 wherein said QoS bit field is set for all packets sent by the user to the data communications network via the SSG which packets belong to at least one packet flow specified in said QoS request.

23. (Original) An apparatus according to claim 19 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the number of packets sent by the user to the data communications network via the SSG which are modified in accordance with QoS request.

24. (Original) An apparatus according to claim 20 wherein said SSG is in communication with AAA server and sends the AAA server information relating to the number of packets sent by the user to the data communications network via the SSG which are modified in accordance with said QoS request.

25. (Original) An apparatus according to claim 21 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the number of packets sent by the user to the data communications network via the SSG which are modified in accordance with said QoS request.

26. (Original) An apparatus according to claim 22 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the number of packets sent by the user to the data communications network via the SSG which are modified in accordance with said QoS request.

27. (Original) An apparatus according to claim 19 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the amount of time that said QoS request is in effect.

28. (Original) An apparatus according to claim 20 wherein said SSG is in communication with an AAA server sends the AAA server information relating to the amount of time that said QoS request is in effect.

29. (Original) An apparatus according to claim 21 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the amount of time that said QoS request is in effect.

30. (Original) An apparatus according to claim 22 wherein said SSG is in communication with an AAA server and sends the AAA server information relating to the amount of time that said QoS is in effect.

31. (New) An apparatus for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, said apparatus comprising:

means for obtaining a user service profile configured with a QoS level for the user in response to a user log-in attempt to a service selection gateway (SSG);

means for routing all packets originated by the user through the SSG during a session;

means for setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user; and

means for passing, after said QoS bits have been set, said packets on to the data communications network.

32. (New) An apparatus in accordance with claim 31 wherein all packets transmitted by the user have QoS bits set in accordance with QoS level for the user.

33. (New) An apparatus for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, said apparatus comprising:

means for initiating a request to an authentication, authorization and accounting (AAA) server in response to the user's attempt to log-in;

means for receiving, in response to said request, a user service profile corresponding to the user, said user service profile including a Quality of Service field; and

means for using said Quality of Service field to set the QoS bits within said packets transmitted by the user.

34. (New) An apparatus in accordance with claim 33 wherein all packets transmitted by the user have QoS bits set in accordance with said Quality of Service field of said user.

35. (New) An apparatus for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, said apparatus comprising:

means for receiving, at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user;

means for assigning, in response to said request, a Quality of Service level to said at least one packet flow;

means for setting said QoS bits within said packets belonging to said at least one packet flow received at the service selection gateway in accordance with said Quality of Service level; and

means for transmitting said packets belonging to said at least one packet flow to the data communications network.

36. (New) An apparatus in accordance with claim 35 wherein all of said packets of said at least one packet flow are IP packets.

37. (New) An apparatus in accordance with claim 36 wherein said QoS bits are the precedence bits within the ToS/Differentiated Services field of said IP packets.

38. (New) An apparatus in accordance with claim 35, further comprising:

means for communicating between the service selection gateway and an AAA server request.

39. (New) An apparatus in accordance with claim 38, further comprising:

means for communicating between the service selection gateway and the AAA server information related to the quantity of packets transmitted by the user and modified by the service selection gateway with respect to the QoS bits.

40. (New) An apparatus in accordance with claim 38, further comprising:

means for communication between the service selection gateway and the AAA server information related to the duration of time that packets transmitted by the user are modified by the service selection gateway with respect to the QoS bits.

41. (New) An apparatus in accordance with claim 40, further comprising:

means for communicating between the service selection gateway and the AAA server information related to the quantity of packets transmitted by the user and modified by the service selection gateway with respect to the QoS bits.

42. (New) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, the method comprising:

obtaining a user service profile configured with a QoS level for the user in response to a user log-in attempt to a service selection gateway (SSG);

routing all packets originated by the user through the SSG during a session;

setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user; and

passing, after said QoS bits have been set, said packets on to the data communications network.

43. (New) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, the method comprising:

initiating a request to an authentication, authorization and accounting (AAA) server in response to the user's attempt to log-in;

receiving, in response to said request, a user service profile corresponding to the user, said user service profile including a Quality of Service field; and

using said Quality of Service field to set the QoS bits within said packets transmitted by the user.

44. (New) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, the method comprising:

receiving, at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user;

assigning, in response to said request, a Quality of Service level to said at least one packet flow;

setting said QoS bits within said packets belonging to said at least one packet flow received at the service selection gateway in accordance with said Quality of Service level; and

transmitting said packets belonging to said at least one packet flow to the data communications network.